

- AI
SVB
DI
1. (Amended) A method for separating electronic components joined by a row-by-row array of solder interconnections comprising the steps of:
 - supplying an electronic component assembly having at least two components joined by a plurality of solder interconnections in a row-by-row array and having a first thickness;
 - providing a cutting element having a thickness less than the first thickness of the solder interconnections;
 - heating the cutting element to a temperature sufficient to melt the solder at the point of contact when the cutting element is in contact with and forced against the solder interconnections;
 - positioning the heated cutting element adjacent one of the rows of the solder interconnections;
 - applying a force to advance the heated cutting element through the row of solder interconnections whereby the heated cutting element engages and cuts through the row of solder interconnections and severs the row of solder interconnections;
 - continuing the above steps for the remaining rows of solder interconnections to cut and sever all the rows of solder interconnections; and
 - separating the two components.

1 8. (Amended) An apparatus for separating electronic components joined by a
2 row-by-row array of solder interconnections comprising:
3 securing means to hold an electronic assembly having at least two components
4 joined by a plurality of solder interconnections in a row-by-row array and
5 having a first thickness;
6 a cutting element having a thickness less than the thickness of the solder
7 interconnections;
8 a heater to heat the cutting element to a temperature sufficient to melt the
9 solder at the point of contact when the cutting element is contacted with
10 and forced forward against a row of the solder interconnections;
11 positioning means to position the heated cutting element adjacent one of the
12 rows of solder interconnections;
13 advancing means to force the heated cutting element against the row of solder
14 interconnections and through the row of solder interconnections whereby
15 the heated cutting element cuts and severs the row of solder
16 interconnections; and
17 separating means to separate the two components when all the rows of solder
18 interconnections have been cut and severed row-by-row by the heated
19 cutting element.

Please cancel claims 7 and 14 and add the following new claims 16 and 17:

- 1 16. A method for separating electronic components joined by a row-by-row
2 array of solder interconnections comprising the steps of:
3 supplying an electronic component assembly having at least two components
4 joined by a plurality of solder interconnections in a row-by-row array and
5 having a first thickness;
6 providing a water jet cutting element having a thickness less than the first
7 thickness of the solder interconnections;
8 positioning the water jet cutting element adjacent one of the rows of the solder
9 interconnections;
10 applying a force to advance the water jet cutting element through the row of
11 solder interconnections whereby the water jet cutting element engages and
12 cuts through the row of solder interconnections and severs the row of
13 solder interconnections;
14 continuing the above steps for the remaining rows of solder interconnections to
15 cut and sever all the rows of solder interconnections; and
16 separating the two components.

- 1 17. An apparatus for separating electronic components joined by a row-by-row
2 array of solder interconnections comprising:
- 3 securing means to hold an electronic assembly having at least two components
4 joined by a plurality of solder interconnections in a row-by-row array and
5 having a first thickness;
- 6 a water jet cutting element having a thickness less than the thickness of the
7 solder interconnections;
- 8 positioning means to position the water jet cutting element adjacent one of the
9 rows of solder interconnections;
- 10 advancing means to force the water jet cutting element against the row of
11 solder interconnections and through the solder interconnections whereby
12 the water jet cutting element cuts and severs the row of solder
13 interconnections; and
- 14 separating means to separate the two components when all the rows of solder
15 interconnections have been cut and severed row-by-row by the water jet
16 cutting element.